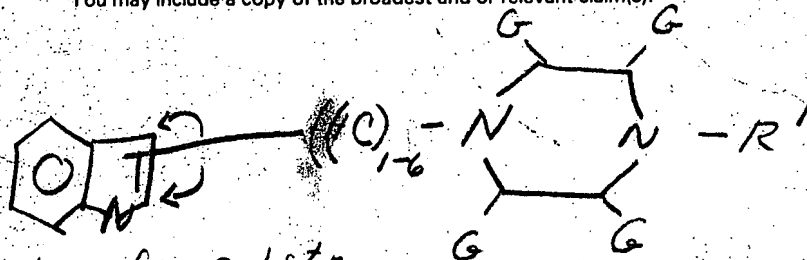


John, please  
3-25  
ONLINE SEARCH REQUEST FORM\*\*\*\*\*  
USER E Bernhardt SERIAL NUMBER 314 734ART UNIT \_\_\_\_\_ PHONE 308-4714 DATE 3/8/95

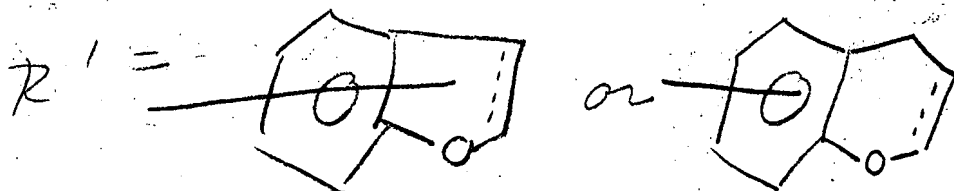
Please give a detailed statement of requirements. Describe as specifically as possible the subject matter to be searched. Define any terms that may have special meaning. Give examples or relevant citations, authors, or keywords, if known.

You may include a copy of the broadest and or relevant claim(s).



allow for substn.  
on indole  
ring system

G = H, Me, Et,



Allow for optional  
substitution on these  
ring systems

See what you get

\*\*\*\*\*  
STAFF-USE ONLY

COMPLETED 3-9-95  
SEARCHER SDMN 0  
ONLINE TIME 10 TOTAL TIME 20  
(in minutes)  
NO. OF DATABASES 3

SYSTEMS  
☒ CAS ONLINE  
☐ DARC/QUESTEL  
☐ DIALOG  
☐ SDC  
☐ OTHER

=> fil reg

FILE 'REGISTRY' ENTERED AT 07:55:39 ON 09 MAR 95

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STRUCTURE FILE UPDATES: 3 MAR 95 HIGHEST RN 161274-47-1

DICTIONARY FILE UPDATES: 8 MAR 95 HIGHEST RN 161274-47-1

TSCA INFORMATION NOW CURRENT THROUGH MAY 1994

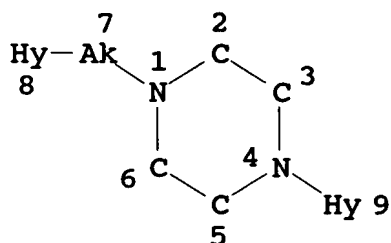
Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

=>

=>

=> d que 16

L2 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

GGCAT IS PCY HIC LOQ UNS AT 8

GGCAT IS PCY HIC LOQ UNS AT 9

DEFAULT ECLEVEL IS LIMITED

ECOUNT IS E8 C E1 N AT 8

ECOUNT IS M8 C E1 O AT 9

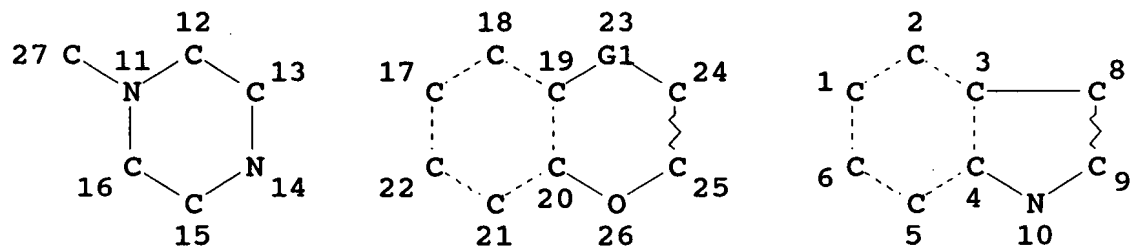
GRAPH ATTRIBUTES:

RSPEC 1

NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE

L4 STR



REP G1=(0-1) C

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 26

STEREO ATTRIBUTES: NONE

L6 3 SEA FILE=REGISTRY SSS FUL L2 AND L4

=> d 1-3 ide can

L6 ANSWER 1 OF 3 REGISTRY COPYRIGHT 1995 ACS

RN 131084-05-4 REGISTRY

CN 1H-Indole, 1-butyl-3-[4-[4-(2,3-dihydro-7-benzofuranyl)-1-piperazinyl]butyl]-2,3-dihydro-, ethanedioate (1:2) (9CI) (CA INDEX NAME)

MF C28 H39 N3 O . 2 C2 H2 O4

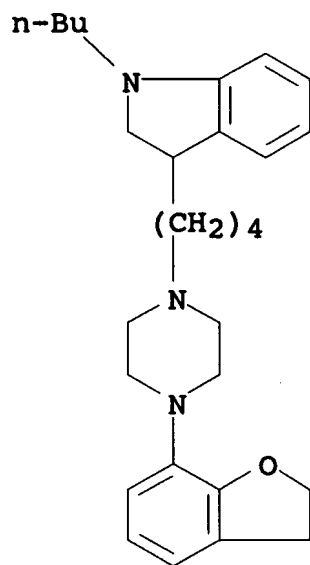
SR CA

LC STN Files: CA, TOXLIT, USPATFULL

CM 1

CRN 131083-77-7

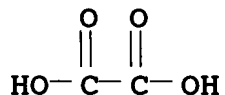
CMF C28 H39 N3 O



CM 2

CRN 144-62-7

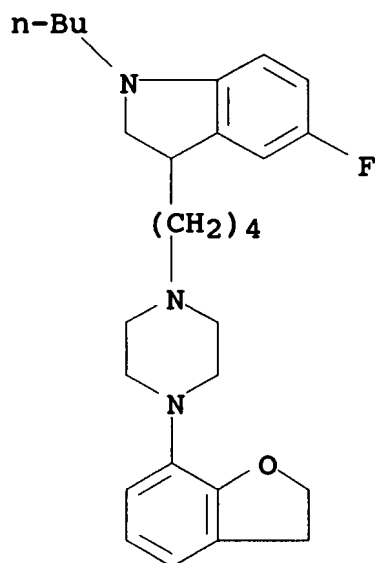
CMF C2 H2 O4



1 REFERENCES IN FILE CA (1967 TO DATE)

REFERENCE 1: P 114:17582

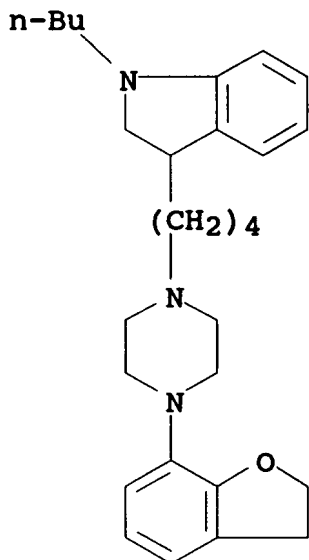
L6 ANSWER 2 OF 3 REGISTRY COPYRIGHT 1995 ACS  
RN 131083-92-6 REGISTRY  
CN 1H-Indole, 1-butyl-3-[4-[4-(2,3-dihydro-7-benzofuranyl)-1-piperazinyl]butyl]-5-fluoro-2,3-dihydro- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C28 H38 F N3 O  
SR CA  
LC STN Files: CA, TOXLIT, USPATFULL



1 REFERENCES IN FILE CA (1967 TO DATE)

REFERENCE 1: P 114:17582

L6 ANSWER 3 OF 3 REGISTRY COPYRIGHT 1995 ACS  
RN 131083-77-7 REGISTRY  
CN 1H-Indole, 1-butyl-3-[4-[4-(2,3-dihydro-7-benzofuranyl)-1-piperazinyl]butyl]-2,3-dihydro- (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C28 H39 N3 O  
CI COM  
SR CA  
LC STN Files: CA, TOXLIT, USPATFULL



## 1 REFERENCES IN FILE CA (1967 TO DATE)

REFERENCE 1: P 114:17582

=&gt; fil ca

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FILE COVERS 1967 - 4 Mar 1995 (950304/ED) VOL 122 ISS 10

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L7 1 L6

=&gt; d all

L7 ANSWER 1 OF 1 CA COPYRIGHT 1995 ACS

AN 114:17582 CA

TI Preparation of piperazinyl derivatives, and their use as  
serotonergic agonists in the treatment of central nervous system  
disorders

IN Perregaard, Jens; Stenberg, John Willie

PA Lundbeck, H., og Co. A/S, Den.

SO Eur. Pat. Appl., 18 pp.

CODEN: EPXXDW

PI EP 376607 A1 900704

DS R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE

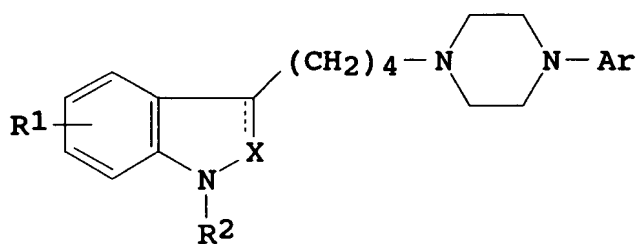
AI EP 89-313371 891220

PRAI GB 88-30312 881228

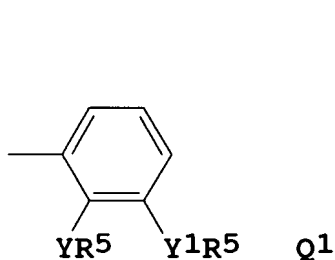
DT Patent

= US 5002948

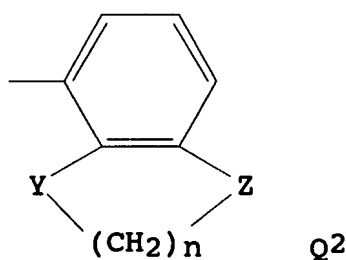
LA English  
 IC ICM C07D209-14  
 ICS C07D231-56; C07D231-54; C07D405-12; C07D409-12; C07D411-12;  
 A61K031-40  
 CC 1-11 (Pharmacology)  
 Section cross-reference(s): 28, 63  
 OS MARPAT 114:17582  
 GI



I



Q1



Q2

AB The title derivs. I [dotted line is optional bond; X = CH, CH<sub>2</sub>, N(H), C:O; R<sub>1</sub> = H, halogen, (un)branched C<sub>1</sub>-6 alk(en)yl, trifluoromethyl; R<sub>2</sub> = H, (un)branched (un)substituted C<sub>1</sub>-6 alk(en)yl; Ar = Q<sub>1</sub>, Q<sub>2</sub> (Y = O, S; Y<sub>1</sub> = H, O, S, CH<sub>2</sub>; Z = O, S, CH<sub>2</sub>; n = 1-3; R<sub>5</sub> = (un)branched C<sub>1</sub>-6 alk(en)yl)], and their pharmaceutically acceptable acid addn. salts and stereoisomers, are prepd. for use in treatment of central nervous system disorders, including anxiety, depression, and aggression, or in diseases related to cardiovascular, renal, and gastrointestinal systems. Methods of prepn. of I and pharmaceutical compns. contg. I are also provided. I have central serotonin activity with preference for the 5-HT<sub>1A</sub> receptor. Thus, 3-[4-(4-(2-methoxyphenyl)-1-piperazinyl)-1-butyl]-1H-2,3-dihydroindole dioxalate (prepn. given) inhibited 5-methoxy-N,N-dimethyltryptamine-induced 5-HT syndrome in rats with ED<sub>50</sub> = 1.9 .mu.mole/kg. A tablet formulation contained 3-[4-(4-(1,4-benzodioxan-5-yl)-1-piperazinyl)-1-butyl]-1H-2,3-dihydroindole dioxalate 5, lactose 18, potato starch 27, saccharose 58, sorbitol 3, talcum 5, gelatine 2, povidone 1, and Mg stearate 0.5 mg.

ST piperazine deriv serotoninergic 5HT<sub>1A</sub> agonist; central nervous system treatment piperazine deriv

IT Pharmaceutical dosage forms  
 (injections, of piperazine deriv. 5-HT<sub>1A</sub> agonist, for central nervous system disorders treatment)

IT Neurotransmitter agonists

(serotoninerpic S1A, piperazine derivs. as, prepn. of and pharmaceuticals contg.)

IT Pharmaceutical dosage forms  
(syrups, of piperazine deriv. 5-HT1A agonist, for central nervous system disorders treatment)

IT Pharmaceutical dosage forms  
(tablets, of piperazine deriv. 5-HT1A agonist, for central nervous system disorders treatment)

IT 131083-84-6P 131083-94-8P  
(prepn. and reaction of, for serotoninerpic 5-HT1A agonist)

IT 131083-83-5P 131083-86-8P 131083-87-9P 131084-17-8P  
131084-18-9P 131084-24-7P 131084-25-8P 131084-28-1P  
131084-29-2P 131084-30-5P  
(prepn. and reaction of, in serotoninerpic 5-HT1A agonist prepn.)

IT 131083-77-7P 131083-89-1P 131083-91-5P  
131083-92-6P 131083-96-0P 131083-98-2P 131084-00-9P  
131084-01-0P 131084-02-1P 131084-03-2P 131084-04-3P  
131084-05-4P 131084-07-6P 131084-09-8P 131084-11-2P  
131084-12-3P 131084-14-5P 131084-15-6P 131084-23-6P  
131084-27-0P 131084-31-6P 131109-70-1P  
(prepn. of, for serotoninerpic 5-HT1A agonist)

IT 328-87-0, 2-Chloro-5-trifluoromethylbenzonitrile 928-51-8,  
4-Chloro-1-butanol 35386-24-4, 1-(2-Methoxyphenyl)piperazine  
131083-82-4 131083-85-7  
(reaction of, in serotoninerpic 5-HT1A agonist prepn.)

IT 131084-20-3 131084-22-5  
(resoln. of, for serotoninerpic 5-HT1A agonist)

IT 131083-76-6 131083-77-7 131083-78-8 131083-79-9  
131083-81-3 131084-16-7  
(serotoninerpic 5-HT1A agonist)

IT 110-85-0D, Piperazine, derivs.  
(serotoninerpic 5-HT1a agonists)

=> fil caold caprev

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=> s 16

FILE 'CAOLD'

L8 0 L6

FILE 'CAPREVIEWS'

L9 0 L6

TOTAL FOR ALL FILES

L10 0 L6

=> fil hom

FILE 'HOME' ENTERED AT 07:56:26 ON 09 MAR 95